BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands	)	WT Docket No. 06-49
	)	

COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Telecommunications Industry Association ("TIA") hereby submits comments in response to the Notice of Proposed Rulemaking in the above-captioned proceeding.[1]

I. INTRODUCTION

TIA is the leading trade association for the communications and information and communications technology ("ICT") industry, with 600 member companies that manufacture or supply the products and services used in global communications across

all technology platforms. TIA represents its members on the full range of public policy issues affecting the ICT industry, owns and produces GLOBALCOMM™ - the next-generation global communications marketplace and summit, and is fully accredited by the

[1] *Notice of Proposed Rulemaking,* FCC 06-24 (released March 7, 2006) ("NPRM").

American National Standards Institute ("ANSI") to produce industry consensus standards. Among their numerous lines of business, TIA member companies design, produce and deploy equipment using radio spectrum in the bands that are subject to the issues addressed in this NPRM. As a result, TIA has a substantial interest in current and future Federal Communications Commission ("FCC" or "Commission") spectrum management decisions and activities related to the development of new rules in the subject bands, for both licensed and unlicensed operations.

TIA member companies design, develop and manufacture a wide array of communications equipment, including systems that are subject to, and affected by, the Commission's regulatory oversight. TIA members have both a substantial interest in the development and operation of unlicensed devices in the M-LMS Bands, as well as an interest in ensuring that licensees in this band do not experience or cause harmful interference. TIA therefore has a direct interest in the spectrum management activities of the Commission and, more specifically, in the outcome of the issues addressed in this NPRM. TIA requests that the Commission take into consideration the views expressed above.

In this NPRM, the Commission seeks comment on changes or additions to rules contained in Part 90 of the its regulations governing the licensing and use of frequencies in the 904-909.75 and 919.75-928 MHz portions of the 902-928 MHz band. This spectrum has a mix of federal, licensed, and

unlicensed operations. It is shared by a variety of Part 15 devices and has been licensed for specified uses by the multilateration Location and Monitoring Service ("M-LMS"). The FCC initiated this proceeding to determine whether new rules could produce more efficient and effective use of the 904-909.75 and 919.75-928 MHz spectrum band ("M-LMS Band") by M-LMS licensees. Specifically, the Commission inquires whether it could promote the development of new services by establishing rules that would replace certain restrictions on M-LMS operations and grant M-LMS licensees more flexibility to respond to market conditions. Finally, the FCC has noted the considerable growth, not only in number, but also in types of applications, for unlicensed Part 15 devices using the 902-928 MHz band and has indicated its intention that this rulemaking not create major consequences nor significantly increase the amount of interference for such devices.

TIA strongly supports the Commission's desire to promote more efficient use of spectrum and to create opportunities for new and additional uses of wireless communications by the American public. As wireless platforms are an increasingly popular alternative for business and residential consumers to access services, wireless technologies have the potential to deliver service to rural and underserved areas and to compete with existing and future wired broadband technologies. TIA agrees it is important to encourage the deployment of advanced wireless networks and consumer

wireless products that can support converged communications services offering consumers competitive choices of voice, video and data applications.

In particular, TIA recognizes that there are millions of unlicensed Part 15 devices that are currently using the M-LMS Band and that the market is growing rapidly. As the Commission notes, unlicensed Part 15 devices use this band for important applications that benefit consumers. "Consumers and businesses benefit greatly from their ability to use unlicensed devices in the 902-928 MHz band, and such devices continue to operate effectively despite the assignment of higher-priority spectrum usage rights to M-LMS and other licensed uses of the band."[2]

Accordingly, for reasons detailed below, TIA respectfully urges the Commission to refrain from modifying its regulations governing the licensing and operation of M-LMS systems. We believe that the proposed rule changes will adversely impact the existing unlicensed Part 15 devices and systems using the band and would constrain the future development of innovative consumer and business applications.

II. DISCUSSION

There are millions of unlicensed Part 15 devices operating in the 902-928 MHz

band. These include cordless telephones, RFID devices, utility load management and remote meter reading devices, telemetry and security devices such as alarm devices, vehicle tracking systems, traffic control systems, home security systems, medical devices, wireless speakers, intercom devices, wireless keypads and mouse controllers, baby monitors, video cameras, and network devices that provide wireless high-speed data and Internet-type services.

Since 1995 the Commission has required these unlicensed devices to share a portion of the band, 904-909.75 and 919.75-928 MHz, with multilateration Location and Monitoring Service networks. M-LMS systems track and locate objects over a wide geographic area by measuring the difference in time arrival, or difference in phase, of signals transmitted from a unit to a number of fixed points, or from a number of fixed points to the unit that is to be located.

In order to minimize the potential for interference with unlicensed devices, the Commission placed certain restrictions on M-LMS operations, including restrictions on the types of services that could be provided. "Specifically, the Part 90 rules circumscribe the scope of permissible M-LMS service offerings such that licensees may only use non-voice radio techniques to determine the location and status of mobile radio units and may transmit status and instructional messages, either voice or non-voice, only so long as

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[2] *See* NPRM at para. 13

they relate to the location or monitoring functions of the system. In addition, M-LMS licensees are prohibited from using real-time interconnection with the public switched telephone network (PSTN), except for emergency communications sent to or received from a system dispatch point or public safety answering points."[3] Additional Part 90 rules further seek to facilitate spectrum sharing by regulating potential interference between M-LMS licensees and unlicensed Part 15 devices.

The Commission auctioned M-LMS licenses in 1999 (Auction 21) and 2001 (Auction 39). Since that time, M-LMS licensees have not been able to generate significant market interest in their services. In 2002 Progeny LMS, LLC ("Progeny") filed a Petition for Rulemaking requesting changes in the Part 90 M-LMS rules seeking greater flexibility in the use of their spectrum. TIA believes that the changes being sought by Progeny and envisioned in this NPRM will result in harmful interference to the millions of unlicensed Part 15 devices that use this same spectrum today.

TIA believes that the efficient spectrum usage afforded by the unlicensed Part 15 devices in the M-LMS Band are essential for continued innovation in a wide variety of products and applications that are important to consumers and businesses alike. Many of the unlicensed Part 15 devices in this band operate at extremely low power, often at power levels substantially lower than maximum limits allowed under the Commission's

[3] See NPRM at para 8

rules. For example, cordless telephones in this band operate at extremely low power in order to conserve battery life.

Low power devices are particularly vulnerable to interference. While the Commission has correctly cited the power levels allowed for spread spectrum devices under Part 15.247 of its rules, many of the unlicensed devices in this band are operating under part 15.249 of the Commission's rules. Such devices include cordless telephones, loudspeaker and stereo headphone systems, home control and security devices, and meter reading equipment, among others. Radiated emissions for devices operating under Part 15.249 in the 902-929 MHz band are limited to field strengths of 50 millivolts/meter, which corresponds to an approximate transmit power level of 0.7 milliwatts.

Thus, even the reduced power limits for M-LMS licensees contemplated in this NPRM would be likely to cause interference to the millions of unlicensed Part 15 devices already in the hands of consumers and utilized for many critical commercial applications. The proposed 6.1 Watts of power for these devices would be about 4 orders of magnitude (6.1 W divided by 0.7 mW is a factor of 8714 times) greater than the allowed power level for devices operating under Part 15.249. Further, the proposals to relax the restrictions on M-LMS licensees would facilitate and encourage the deployment of high density, high traffic networks by today's M-LMS

operators. Such networks would necessarily increase the likelihood of harmful interference to unlicensed Part 15 devices in this band.

TIA strongly supports the Commission's desire to ensure that all authorized users of the M-LMS Band are protected from harmful interference, and TIA supports the existing "safe harbor" rules providing that Part 15 and amateur operations that comply with certain technical parameters will not be considered to be causing harmful interference to M-LMS systems. To date, these safeguards have protected all users of the M-LMS Band, both licensed and unlicensed, from harmful interference. We agree, as is being addressed in the NPRM, that the Commission should take measures to ensure that the safeguards it adopts will allow unlicensed operation in the M-LMS Band without receiving harmful interference from the other services that use this spectrum. Specifically, the existing safe harbor rules should be maintained without modification.

III. CONCLUSION

TIA applauds the Commission's desire to promote more efficient use of spectrum and to create opportunities for new and additional uses of wireless communications. TIA has long believed that sound spectrum management is critical to the future success of the communications industry and to maximize benefits to consumers. TIA strongly supports Commission consideration of

mechanisms that allow more efficient use of spectrum for wireless services, including the use of unlicensed devices in the M-LMS Band.

As a result TIA respectfully urges the Commission to refrain from modifying its regulations governing the licensing and use of the M-LMS Band by M-LMS systems. We believe that the proposed rule changes will adversely impact the use of the 902-928 MHz band by unlicensed Part 15 devices and is therefore not in the public interest.

Respectfully submitted,

Telecommunications Industry Association

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